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# OBSERVATIONS ON PSEUDOMYRMEX ELONGATA MAYR (HYMENOPTERA: FORMICIDAE)

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The purpose of this note is to report the presence of *Pseudomyrmex elongata* Mayr in southern Texas and northeastern Mexico and to attempt a clarification of certain points in the taxonomy of this species. During 1951 and 1952 the writer took seven colonies of *elongata,* all of them in areas from which the insect has not been previously reported.[1] These records are as follows:

TEXAS: Monte Alto (60′) Hidalgo County, one colony in *Prosopis juliflora.*

26 miles north of Raymondsville, one colony in *Quercus virginiana.*

NUEVO LEON: El Pastor (2200′) west of Montemorelos, two colonies in *Quercus fusiformis.*

TAMAULIPAS: Canyon de el Abra (1000′) north of Antiguo Morelos, one colony in hollow stem.

SAN LUIS POTOSI: 3 miles north of Ciudad Valles (300′), one colony in hollow twig.

Rio Amahac, Tamazunchale (300′), one colony in dead twig.

The above records are of interest since they extend the range of *elongata* on the western side of the Gulf of Mexico by almost fifteen hundred miles. The previous northern record for this region was Costa Rica. It is now clear that *elongata* reaches approximately the same latitude on either side of the Gulf, for the Texas stations and those where *elongata* has been secured in southern Florida are all close to Latitude 26°. This makes necessary a modification of the view that the writer published in 1950 (1) that *elongata* probably reached Florida by way of the Antilles. The writer still feels that the above explanation is the most likely one, but the presence of *elongata* in northeastern Mexico and south Texas makes it possible that at one time the

[1] Field work done on a Guggenheim Fellowship.

range of *elongata* included the entire Gulf Coast. If so, its presence in southern Florida could be due to a regression to the south rather than to a migration to the north.

Because slight structural variations were found in the material coming from Texas and Mexico, the writer examined all available material belonging to this species. This examination has led to a different view from that which I published in 1950. At that time I accepted Wheeler's concept that the Cuban and Antillean representatives of *elongata* (the variety *cubaensis* Forel) were significantly different from the Florida population, which Wheeler treated as the typical *elongata.* I no longer believe this to be the case. Since I have seen no material of *elongata* coming from the southern part of its range, which extends to Colombia, the observations which follow may not apply to such specimens, although it seems probable that they do. But the population of *elongata* which occurs in southern Florida, the Bahamas, Cuba, Haiti, Jamaica, south Texas and northeastern Mexico cannot, in my opinion, be divided into geographical races. It is not that this population is invariable in structure, for there are minor differences in size, color, the width of the head and the shape of the petiolar node. But these differences occur in all parts of the range mentioned above. Unfortunately, these same variations were used by Forel as the basis for the recognition of the varieties *cubaensis* and *tandem.* Thus *cubaensis* was supposedly marked by a narrower head and a narrower and lower petiole, while *tandem* represented the opposite condition where the head is broader and the petiole shorter and higher. There is no difficulty in recognizing the variants that Forel described, but to assign to either of them a distinctive geographical range seems to the writer to be impossible. I propose, therefore to treat *cubaensis* and *tandem* as synonyms of the typical *elongata.* The synonymy of this species would be as follows:

*Ps. elongata* Mayr, Sitz. ber. Akad. Wien, Vol. 61, p. 413 (1870) ♀ Wheeler, Bull. Amer. Mus. Nat. Hist. Vol. 21, p. 85 (1905) ♀♀♂.

*Ps. elongata* var. *cubaensis* Forel, Ann. Soc. Ent. Belg. Voy. 45, p. 342 (1901) ♀. NEW SYNONYMY.

*Ps. elongata* var. *tandem* Forel, Ibid. Vol. 50, p. 228 (1906) ♀. NEW SYNONYMY.

The insect which Wheeler and Mann described in 1914 (2) as *Ps. elongata* subsp. *subatra* is clearly a separate species which should never have been assigned to *elongata.*

Despite the variations mentioned above, *elongata* is an easy species to recognize. It is small, dark in color and very densely sculptured, so that the surface presents a dull, matte-like appearance. Coupled with these characters is an unusually narrow head, with the large eyes extending to the level of the median ocellus and a short and high petiolar node (even in the variants where it is said to be "lower and longer"). This ease of recognition may account for the fact that neither Forel nor Wheeler ever failed to appreciate the salient characteristics of *elongata,* although neither worker was willing to discount the slight variations which mark this species over much of its range. It is interesting to note that in 1932 (3) Wheeler stated that there are "several varieties" of *elongata* in Cuba. Fortunately, he did not elect to name them.

There follows a key to the species of *Pseudomyrmex* which occur in the United States. This key is based on major structural characters as well as on the differences of color and pilosity which the writer employed as criteria in the key published in 1950.

1. The maximum diameter of the head (eyes included) distinctly greater than the distance from the occipital margin to the anterior edge of the clypeus; anterior peduncle of the petiole slender, distinct from the node and at least one-third as long as the node; erect body hairs everywhere abundant; length 8 mm. or more ..... *gracilis mexicana*
   The maximum diameter of the head (eyes included) no more and usually much less than the distance from the occipital margin to the anterior edge of the clypeus; anterior peduncle of the petiole short, thick and often not clearly distinguishable from the node; erect body hairs sparse; length 6 mm. or less ..... 2
2. The median ocellus lying at or very close to the level of the posterior border of the eyes; appressed pubescence abundant ..... *elongata*
   The median ocellus lying well behind the level of the posterior border of the eyes; appressed pubescence dilute or absent ..... 3
3. Thorax seen in profile with a broad and deep impression at the mesoepinotal suture; sides of the postpetiole, seen from above slightly concave giving a short but distinct anterior peduncle to the node; color dark brown, the head, pronotum and petiolar nodes more or less marked with yellow ..... *brunnea*
   Thorax seen in profile with the mesoepinotal suture unimpressed or feebly

and narrowly impressed; sides of the postpetiole, seen from above, slightly convex, the node without an anterior peduncle; color golden yellow to pale yellow ..... 4

4. Greatest length of the eye a little less than one-half the distance from the insertion of the mandible to the occipital margin; cephalic sculpture heavy enough to dull the surface; worker 5–6 mm., female 7–8 mm.

*apache*

Greatest length of the eye a little more than one-half the distance from the insertion of the mandible to the occipital margin; cephalic sculpture fine, not dulling the surface; worker 4–4.5 mm., female 5.5–6 mm.

*pallida*

In conclusion it may be said that *elongata* is a rather timid and inoffensive ant compared to most species of *Pseudomyrmex*. It rarely stings and has a habit of dodging around to the rear of a twig if an attempt is made to pick it up. The colonies never seem to be very populous. There are rarely more than a hundred workers in a colony and usually the number is less. In most colonies a single female is present. It is noteworthy that *elongata* and *brunnea* will sometimes nest in the same limb. Most species of *Pseudomyrmex* are by no means so tolerant and ferociously exclude any other ants from the areas where they are nesting.

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3. WHEELER, W. M. 1932. Jour. N. Y. Ent. Soc. 40. p. 4.